

# Portable Fuel Container (PFC) Public Workshop

California Air Resources Board  
Monitoring and Laboratory Division



*August 16, 2005  
Sacramento, California*



## Agenda

- PFC Regulatory Process
- Proposed PFC Requirements
- Implementation Schedule
- New PFC Certification Process
- Proposed Diurnal Test Procedure (TP-502)
- Proposed Spout Test Procedure (TP-501)
- Recent Issues
- Next Steps

# PFC Regulatory Process

- ARB Develops the PFC Rulemaking Proposal:
  - Conduct research, studies and testing
  - Hold public workshops and meetings
- Today's Discussion. Final proposal released, 45-day comment period starts.
- Board Hearing September 15-16, 2005 at the South Coast AQMD (Diamond Bar, CA)
  - continued

# PFC Regulatory Process

## Board Hearing

- Tentative Board Agenda (hearing date and time) is posted on the ARB's web site at:  
<http://www.arb.ca.gov>
- Final Board Agenda will be posted 10 days prior (September 5, 2005) on the same web page
- Without Notice! Board Agenda can be changed the day of the hearing at the discretion of the Chairperson

## Proposed PFC Requirements

- Fill Height & Flow Rate removed
- Automatic Shutoff removed
- Secondary Opening definition broadened
- Closure by force criteria broadened

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## Proposed PFC Requirements

- Reduced pressure requirement (5 psig)
- PFC definition broadened
  - Kerosene Containers
  - Utility Jugs
- New PFC labeling requirements
- Voluntary Consumer Acceptance Program and ARB Star Rating System

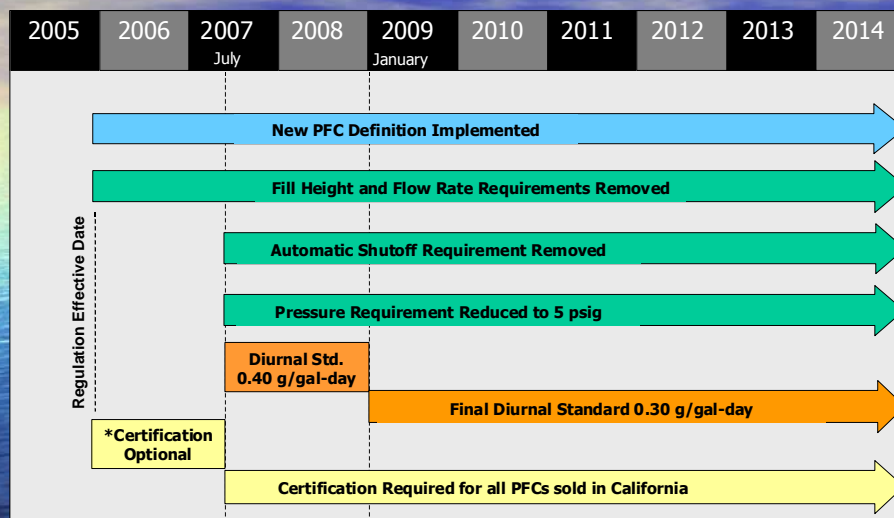
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# Proposed PFC Requirements

- Diurnal Standard:
- Initial Diurnal Standard 0.40 g/gal-day beginning July 1, 2007
- Final Diurnal Standard 0.30 g/gal-day beginning January 1, 2009

## Implementation Schedule



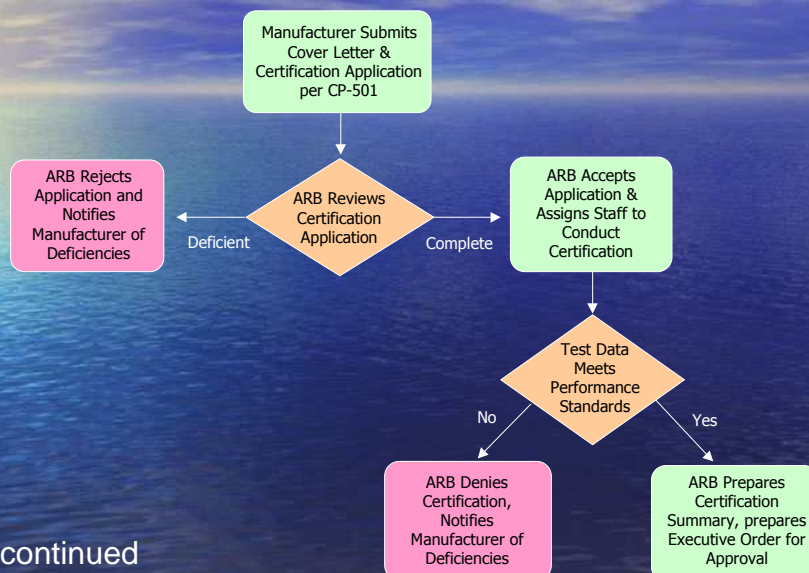
\*Certification optional following regulation effective date.

# New PFC Certification Process

- The proposed certification procedure (CP-501) would be a new requirement for PFCs
- Certification is not a current PFC requirement
- Intended to eliminate poor production quality and low consumer acceptance by enabling staff to review products prior to entering the marketplace
- Requires a manufacturer to submit an application, test data and sample PFCs to ARB for review

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# New PFC Certification Process



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## New PFC Certification Process

- If all certification criteria is met, staff drafts preliminary Executive Order (EO) for approval
- EO is submitted to ARB's Executive Office for final approval. Approved EO's posted on web at:

<http://www.arb.ca.gov/pfc/eo/eo.htm>

- Examples of Vapor Recovery and Small Off-Road Engine Executive Orders can be found at:

<http://www.arb.ca.gov/vapor/eo.htm>

<http://arb.ca.gov/msprog/offroad/cert/cert.php>

## Proposed Diurnal Test Procedure TP-502

- Replaces the existing permeation test for PFCs (Test Method 513)
- Improves emission estimates by testing permeation and evaporation characteristics
- Requires the spout to be tested with gasoline
- Checks for durability similar to in-use conditions
- Procedure focuses on three main components: Equilibrium, Durability and Diurnal testing



# Proposed TP-502

## Equilibrium

- Equilibrium occurs after gasoline saturates plastic and emissions escape into ambient air
- PFCs are pre-soaked with gasoline using either ambient conditions or elevated temperature



# Proposed TP-502

## Durability

- Conducted during the Equilibrium period
- Checks the seals & mechanisms for wear using gasoline (similar to in-use conditions)

Spout Removed - Replaced



PFC Inverted



Spout Opened - Closed



\*Requires 20 spout removal/replacements and 400 open/close cycles over a 140-day period.

# Proposed TP-502

## Diurnal Testing

- Requires three 65°F-105°F-65°F diurnal cycles to replicate summer conditions & ensure stabilization
- PFC expands/contracts checking seals & gaskets
- Mass loss test (no SHED required)

PFC Expands (warm up)



PFC Contracts (cool down)



# Proposed Spout Test Procedure TP-501



- Replaces Test Methods 510, 511 & 512
- Similar to existing Test Methods
- Uses single test procedure to test all functions
- Accommodates proposed requirements



## Recent Issues

- TP-502 - 3.6 Static Electricity
- TP-502 - 7.10(b) Number of Days
- TP-502 - 8.2 Trip Blank
- CP-501 - 2.3(c) Color
- CP-501 - 2.6 Automatic Closure Definition
- CP-501 - 2.8(a) Equipment Intended
- CP-501 - 3.11(b) Specifications Language
- TP-501 - 7.4 Pressure Requirement

## Next Steps

- Hearing Notice asks for comments by noon, September 14, 2005
- Board Hearing September 15-16, 2005 in Southern California (SCAQMD)

### **Post-Board Hearing:**

- Address 15-day changes (if required)
- ARB submits Final Statement of Reasons and package with Office of Administrative Law (OAL)
- ARB has up to one-year from the date of notice (July 29, 2005) to file with OAL

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## Next Steps

- OAL has up to 30-days to approve and file with the Secretary of State.
- Regulation becomes effective 30-days after the date of filing with the Secretary of State

Questions?

# Contact Information

**PFC Web Page:** <http://www.arb.ca.gov/pfc/pfc.htm>

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